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09/666,796

09/21/2000

Teruyuki Motohashi

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12/30/2003

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EXAMINER

CHANG, ERIC

ART UNIT

2116

PAPER NUMBER

DATE MAILED: 12/30/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/666,796

Applicant(s)

MOTOHASHI, TERUYUKI

Examiner

Eric Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

1. Claims 1-18 are pending.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,143,727 to Watts, Jr., in view of U.S. Patent 5,488,384 to Uehara et al.

5. As to claims 1 and 3, Watts discloses a data processing device comprising:

[a] a display unit [col. 4, lines 58-60];

[b] a light-emitting unit which illuminates said display unit [col. 14, lines 56]; and

[c] a controller which limits a current to be supplied to said light-emitting unit when said detector has detected that a specific functional part is connected to the data processing device [col. 661, lines 6-12].

Watts teaches a laptop computer comprising an LCD display. When the laptop detects that it is connected to a specific functional part, that is, an external monitor, the laptop disables

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the LCD display. Because it is well known in the art that a laptop LCD display often comprises a backlight, and that the backlight may comprise a plurality of light emitting units, it would therefore be obvious to one of ordinary skill in the art that disabling the LCD display likewise comprises limiting a current to the backlight of said display, substantially as claimed. Watts teaches all of the limitations of the claim, but does not teach that the specific functional part is detected to be operational, in order to limit said current.

Uehara teaches that the presence of an external monitor may be made by detecting the display signal levels from the monitor [col. 7, lines 26-39]. Because the signal levels from the monitor can only be detected when the monitor is active, Uehara likewise teaches means for determining the operability of the external monitor, and therefore teaches determining if a specific functional part is operable, substantially as claimed.

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the monitor operation detection means as taught by Uehara. One of ordinary skill in the art would have been motivated to do so that the laptop LCD display is only disabled when the external monitor is not only connected, but also operational.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of detecting the presence of an external monitor. Moreover, the monitor operation detection means taught by Uehara would improve the utility of Watts because it allowed for a more intelligent means to determine if the laptop display should be disabled.

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6. As to claims 13-18, Watts and Uehara disclose a data processing device that controls the illumination of the display if it has been detected that a functional part is in operation. Because Watts and Uehara teach the apparatus, Watts and Uehara also teach the methods for operating a device in such a manner, substantially as claimed.

7. Claims 5, 7, 9, 11 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,652,893 to Ben-Meir et al.

8. As to claims 5, 7, 9 and 11, Ben-Meir discloses a data processing device comprising a number of modules, each with a power requirement and means for communicating such to a controller module [col. 19, lines 41-57]. Ben-Meir also teaches that the controller module has a priority scheme to determine which modules should be powered even if insufficient power exists to power all of the modules in the device [col. 20, lines 9-21].

It would be obvious to one of ordinary skill in the art that modules that require power in a data processing device could comprise a display unit and another functional part. Accordingly, if the specific functional part requires more power when insufficient power is available, Ben-Meir teaches that the controller module would limit power to the display unit if it has a lower power priority as defined by the priority scheme [col. 11, lines 37-50].

Furthermore, it is well known in the art that a display could comprise a backlight, comprising one or more light-emitting units; it would therefore be obvious that limiting power to the display unit likewise limits power to the light-emitting units used to illuminate said display. In addition, Ben-Meir teaches that the functional parts of the device used for communicating

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with other devices should be assigned a higher power priority than other modules [col. 14, lines 1-8]. It would also be obvious to one of ordinary skill in the art that such communication parts could comprise a radio transmitter, substantially as claimed.

Thus, Ben-Meir teaches that the current supplied light-emitting units for illuminating a display is limited when a communication part of the device is in operation, substantially as claimed.

9. As to claims 15-18, Ben-Meir discloses a data processing device that controls the illumination of the display if it has been detected that a functional part, such as a radio-communicating unit, is in operation. Because Ben-Meir teaches the apparatus, Ben-Meir also teaches the methods for operating a device in such a manner, substantially as claimed.

10. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,143,727 to Watts, Jr., in view of U.S. Patent 5,488,384 to Uehara et al., and in further view of U.S. Patent 6,205,343 to Montgomery.

11. As to claims 2 and 4, Watts and Uehara teach all of the limitations of the claim, including a light-emitting unit to illuminate a device display, but does not teach that the data interface for the device that is illuminated by said light-emitting unit.

Montgomery teaches a data interface for the device that is illuminated by said light-emitting unit [col. 3, lines 20-23], and that the illumination of the interface occurs in conjunction with the illumination of the display [col. 6, lines 66-67, and col. 7, lines 1-10].

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At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the data interface illumination as taught by Montgomery. One of ordinary skill in the art would have been motivated to do so that the data interface can be illuminated at the same time the display is illuminated.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of controlling the illumination of a device interface. Moreover, the data interface illumination means taught by Montgomery would improve the ergonomics of Watts and Uehara because it allowed the data interface on the device to be easily used even in low-light conditions.

Furthermore, it would be obvious to one of ordinary skill in the art that if the display is disposed in proximity to the interface that the lighting of the display would likewise illuminate the interface.

12. Claims 6, 8, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,652,893 to Ben-Meir et al., in view of U.S. Patent 6,205,343 to Montgomery.

13. As to claims 2, 4, 6, 8, 10 and 12, Ben-Meir teaches all of the limitations of the claim, including a light-emitting unit to illuminate a device display, but does not teach that the data interface for the device that is illuminated by said light-emitting unit.

Montgomery teaches a data interface for the device that is illuminated by said light-emitting unit [col. 3, lines 20-23], and that the illumination of the interface occurs in conjunction with the illumination of the display [col. 6, lines 66-67, and col. 7, lines 1-10].

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At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the data interface illumination as taught by Montgomery. One of ordinary skill in the art would have been motivated to do so that the data interface can be illuminated at the same time the display is illuminated.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of controlling the illumination of a device interface. Moreover, the data interface illumination means taught by Montgomery would improve the ergonomics of Ben-Meir because it allowed the data interface on the device to be easily used even in low-light conditions.

Furthermore, it would be obvious to one of ordinary skill in the art that if the display is disposed in proximity to the interface that the lighting of the display would likewise illuminate the interface.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (703) 305-4612. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



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A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke.

THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100